MONOGRAPH

ON

TINSEL AND WIRE

IN THE

MADRAS PRESIDENCY

BY

W. S. HADAWAY

ILLUSTRATED

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INTRODUCTION.

IN the following account of "Tinsel and Wire" I have endeavoured to describe the processes of production and use of these two articles according to the prevailing native practices. My knowledge of the Madras Presidency is not as extended as I could wish for an object of this sort, but during my stay I have had, in some cases, exceptional opportunities of coming in contact with workmen and merchants who have been of great use to me in the preparation of this monograph.

Though wire is used in almost all processes employed by goldsmiths and jewellers and by other metal workers as well, there is no "wire work" or filagree now made, to my knowledge, in the Presidency, except for one or two workers in Trichinopoly and Woraiyur, but I have taken the subject to include only the use of wire in its relation to weaving and embroidery, and tinsel used as a decoration or as an adjunct to embroidery, etc.

There is a single worker in Travancore also who does a small amount of wire inlay in wood, but most similar work, such as the metal inlay of Quilandi in Malabar, though it often may be mistaken for wire, is, in reality, pierced sheet metal. "Koftgari" also, the process of applying wire to a prepared metal surface, is still practised by a few workers in Travancore.

I have to thank those among my teachers and workmen who have supplied me with information, and Messrs. Daday Khan, the well known Madras embroiderers, who kindly furnished me with details of the native manufacture of gold thread. I am also indebted to Mr. C. W. E. Cotton, I.C.S., who has assisted me with statistics of imports, both of gold thread, and of tinsel.

W. S. HADAWAY.

SCHOOL OF ARTS,
Madras, 23rd August 1909.

Tinsel and Wire.

GOLD THREAD OR "LACE."

MANUFACTURE BY NATIVE PROCESS.

THE gold thread or "lace" which plays such a conspicuous part in ornamental Indian weaving is produced by "fibre plating" a process which is of native origin.

It is described at length by Baden-Powell in his "Industrial Arts of the Punjab" and whether produced by hand spinning or by machinery, the processes in their essentials must of necessity be similar.

An ingot of pure silver, or of silver slightly alloyed with copper, is made of about the thickness of a finger, and six inches to a cubit in length, tapering from the centre to the ends. This is covered with thin plates of pure gold which are made to thoroughly adhere to the silver by hammering and heating. On the thickness of the gold plating depends the colour of the resulting wire, a heavily plated ingot producing a richer coloured result than a thinly plated one.

The ingot is then drawn through a wire draw plate, which is a thick plate of steel having tapering holes, very gradually diminishing in size, until, when it has, perhaps, passed through as many as a hundred holes, it is reduced to a fine hair-like thread.

With each drawing through the plate the wire is lengthened but the gold coating always remains, and gold is so ductile that it is stated that "wire drawers have extended from an ounce of gold a wire 230·800 feet long." As an average, however, 1 oz. of gold is made to cover 1,500 yards of wire. All "gold" thread or lace is made of silver plated wire and no pure gold wire is used. This is due to two reasons, one being the lack of strength of pure gold, and the other the great additional cost.

A usual percentage of metals in wire used for making gold thread is 90 silver, 7 copper and 3 gold.

When the silver plated ingot is drawn down into wire of the required fineness, it is flattened on an anvil with a heavy hammer, 14 or 15 strands at a time.

The flattened wire is then wound spirally around slightly twisted silk thread of a yellow or orange colour and the result is the gold thread or lace so extensively used in weaving and embroidery.

The illustrations (Figures 1 and 2) shew to groups of workers in Madras who carry on the industry of gold thread making along straight stretches of the banks of the river Cooum.

The primitive wooden fly-wheel and the spindles and reels, all of the most simple construction, are shewn in the illustration, and the workers form a most interesting and picturesque sight with their bright orange coloured silk thread and gaily spinning wheel propelled by a small boy using first one hand and then the other, while others walk to and fro guiding the fine ribbon of wire as it is gradually twisted on to the thread of silk.

After the thread is spun, it is wound on a reel and is afterwards formed into skeins or hanks for sale. To do this, the worker sits upon the ground and again winds the thread back and forth from the reel, using his knees as stretchers.

These men are called by various names—"Pattunulkaran" (பட்டு நூல்காரன் one who works in silk thread), "Sourashtras", etc., and are commonly supposed to be of Gujerāti origin.

They call themselves "Aiyar" but are probably a section of the Vaisyas or merchant caste.

They produce only a small quantity of gold thread, and as this is not of a very fine quality and is not so suitable or easily worked in the loom as more mechanically perfect thread, they find their chief market among embroiderers.

Silver thread, which is used only to a small extent, is produced by the same process, omitting the gold plating, and the silver wire is twisted on to white, instead of orange-coloured silk.

MANUFACTURE BY MACHINERY.

The machine-made gold thread is also made in Madras at a factory in Perambur. This factory was started in 1908 by two enterprising native merchants who procured their plant from France, but it has not, until quite recently, proved very successful. The services of an expert "lace" maker and a woman worker as a forewoman were both procured from France, but the expert proving more efficient as a theorist than as a practical worker, his agreement was cancelled and the work was carried on by the proprietors and the forewoman whose practical knowledge was found to be sufficient for the purpose.

This lace is used by the proprietors of the factory, who also conduct weaving operations, and a considerable quantity has been available also for sale in the local market. Orders have been received from Central India, Bombay and the mofussil districts.

This factory is still in an experimental state, and no really definite idea of the feasibility of attempting to compete with the foreign manufacturers can be got from its experience.

The trade, however, is of such dimensions, and has been so rapidly increasing during the last few years that there must be an excellent market awaiting anybody enterprising and experienced enough to establish here the making of gold thread on a large scale by machinery. The cost of carriage and the cheaper labour available alone, are greatly in favour of the native worker.

It is to be regretted that such an important item in the sumptuary arts as gold thread is, in India, that it should, in the great majority of cases, be the machine-made article which is used in place of the old and much superior hand-made thread. The hand-made thread is not only superior in its wearing qualities, the original wire being coated much more firmly with gold, but the artistic quality, owing to its slight irregularities, makes a cloth or embroidery in which it is used a much more human and interesting article altogether.

It is, in many instances, in such seemingly minor and unimportant details that the true cause of the artistic degeneracy of Indian weaving is to be found. There is a very cheap and inferior gold thread produced, used in embroidery, made by covering a foundation thread with metal foil, but I have never seen any examples of it in use in the Madras Presidency.

TRADE IN GOLD THREAD.

Much as it is to be regretted, it must however be acknowledged that by far the larger amount of gold thread used here is imported.

A reference to the table below will shew, not only to what an extent it is used, but also the proportion of the total Indian imports which comes to Madras:—

Table of Imports of Gold Thread into the Port of Madras.

Year.	Value. RS.
*1905–06	19,92,913
1906–07	19,31,879
†1907–08	30,54,723

Total Imports into all India.

Year.	Value. RS.
1905–06	31,57,260
1906–07	33,25,625
1907–08	44,77,446

Proportion of Total Indian Imports which entered the Port of Madras.

Year.	PER CENT.
1905–06	63
1906–07	58
1907–08	68

Imports into Minor ports of the Madras Presidency, 1907–08.

	Value. RS.
From France to Tuticorin	1,506
Do. Calicut	46,930
From United Kingdom to Calicut	475

The imports into Madras for 1908–09 made up from the Monthly Bulletins is valued at Rs. 24,94,568.

From 58 per cent. to 68 per cent. during the three official years 1905–06, 1906–07 and 1907–08 was entered at this port, and practically the whole of it is used in this Presidency.

Small amounts also reach the Presidency through other ports than Madras, but this is a somewhat spasmodic trade.

Of the total amount imported into all Indian ports, 80 per cent. comes from France, though eight other countries send varying amounts, some coming even from the Straits and Hongkong.

The trade with the United Kingdom has decreased from just over half a lakh in 1905–06 to Rs. 18,916 in value during 1907–08.

Of the Madras imports practically all comes from France.

The importing trade is in the hands of a few native merchants who make deposits to the French manufacturers and import as required, some firms importing from a half to one lakh's value of gold thread in a single month. None of the European firms in Madras now deal in gold thread.

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* Figures before 1905–06 not separately enumerated.

† In the Madras Review of Sea-Borne Trade—1907–08—under "Apparel" is the note :—

"The only variation of importance is the increase of 10·92 lakhs in gold and silver thread. The imports are the largest on record, and the increase is "attributed to keen competition between the manufacturer's agents, and to imports direct instead of through Pondicherry."

Formerly the imported thread was from 1,200 to 1,600 yards in length but now it is made up to 2,100 yards. The larger wholesale dealers keep as many as from 25 to 50 different sorts, including different qualities, colours and sizes. The average price per ounce is over Rs. 3. It is, however, sold by the skein which weighs about 10 ounces.

Some of the larger dealers have agents in the important weaving centres such as Madura. The distribution is done mostly by post.

The dealers advance the gold thread to weavers, taking finished cloths in payment or part payment in some instances.

In the mofussil there are only occasional gold thread spinners to be found. References in some of the older District Manuals mention its being made at a number of different centres, but at present, when gold thread is mentioned as being extensively used, there is usually the additional remark that it is "imported from France."

In a very few districts the manufacture is still conducted to a small extent as at Madura where "a few Mussalmans still carry on the industry to supply a surviving demand in Tinnevelly, Trichinopoly and Travancore." Here the women do the final hammering of the wire used to plate the silk thread.

It is probable also that among the Mussalman community the industry is still carried on privately to some extent, for it is quite a common practice among them to do most of the preliminary processes of preparing the material used in their extensive embroideries themselves, but as this is mostly done by their women-folk who are "gosha," it is impossible to give any idea of the amount produced.

Mr. Havell, writing in 1885 of gold and silver thread used in weaving, mentions that the manufacture was still carried on to a slight extent in Madura and Arcot, but, on recent enquiry in Arcot, it was ascertained that it is no longer made there. He also mentions that at that time most of the thread used was imported from Europe.

USES OF GOLD THREAD.

The use of gold and silver thread for the decoration of textiles is either by weaving the thread into the cloth on the loom or by embroidery of the cloth after it is woven.

Patterns woven in the loom are more common here than embroidery, though there is very much more embroidery used than is generally supposed.

Gold thread is seldom used except to form the border of a cloth, though, occasionally, in very fine cloths it may be worked through the whole length. The "border" may refer either to the end border (of a sari) or to the edge, lengthwise, but in either case, gold thread is used almost wholly as a weft thread.

A characteristic sari border is shewn in the reproduction of the Tanjore cloth in Figure 3. It is divided into 3 broad bands across the end of the cloth. These bands together may be a yard in width or more, and the top and bottom ones which are of elaborate and intricate pattern are separated by a plain solid gold space.

When worn, the golden end is brought over the shoulder and hangs down the back. The edges of the sari, when there is an elaborate gold end border, are generally of a plain colour, often a different colour on each side.

In analysing the pattern of Figure 3, it will be seen that the very elaborate effect is produced by comparatively simple means. A repetition of the 5 units of the bands up and down, being taken across and repeated 9 times. In the preliminary planning before setting the harness of the loom, this means that only a small strip of the pattern need be squared off.

This class of pattern in which the same figure is repeated across the cloth, is called "Pitambaram" and is said to be of Benares origin. The cost, reckoned according to the amount of gold thread used, and the elaboration of the pattern, is from Rs. 150 to Rs. 200.

The same arrangement of pattern may also be noted in Figure 4.

In weaving a sari border with gold thread, two men may sit at the loom and each work his shuttle to the centre. After passing each gold thread half way, a plain thread is also passed all the way across, and this serves to bind the gold thread.

In watching weavers use gold thread, it seems a very slow process indeed ; but good workmen can do from a quarter to half a yard in a day, and, as a rule, when the end border is finished, the remainder of the cloth is much more simple weaving.

Figure 6 shews the gold thread border of a man's cloth. The border is from 2 to 3 inches wide and the remainder of the cloth plain.

In the Gódávari district, in making patterned gold thread cloths, the weavers pick up the necessary threads in each passage of the shuttle by hand and so do not use the ordinary harness. This is a particularly slow and tedious manner of working and could only be possible in a district where wages were very low, or the work only occasional.

Some experiments were lately made at Tanjore and Kumbakónam on behalf of the Victoria Technical Institute in weaving silk and gold thread squares suitable for cushion covers and upholstery. Figures 7, 8 and 9 shew 3 of these patterns ; the first two were designed at the School of Arts, Madras, and woven in Kumbakónam ; and the third, which is similar to the filling of the sari (Figure 3) was made in Tanjore.

As a material for fine upholstery work it is difficult to imagine anything more sumptuous.

To enumerate all the centres in which gold thread is used in weaving, would be practically to name every weaving village where cotton or silk is woven, except those doing the very coarsest sort of work. Even the cheaper kinds of cloths frequently have narrow borders or lines of gold running through them and the addition is certainly greatly appreciated by the wearers and adds not a little to the appearance of the cloth.

Prices vary to a very great extent. Women's cloths with gold borders may be purchased for a few rupees, or they may cost as high as Rs. 600 or even more.

Occasionally, when especially ordered for important weddings these very high priced cloths are made by Tanjore weavers, but they do not, as a rule, make many cloths which sell for more than Rs. 200 and prices ranging from Rs. 75 to Rs. 150 are more usual.

The same is true of the weavers in the vicinity of Madura.

The weaving of the fine cloths is in the hands of the Pattunulkarans.

It was hoped that comparisons could be made between the quite new gold laced cloths and those of 40 or 50 years ago, but on consulting the only available copy of Dr. Forbes-Watson's book of samples, it was found that every piece of cloth in which gold thread was used had been extracted.

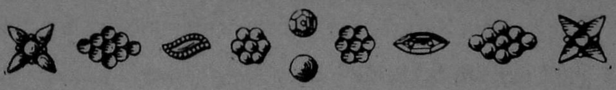
The laced cloths in the Government Museum collection, though none of them very old, show, in comparison with quite new work, that there have been slight improvements in the mechanical perfection of the weaving processes, but this appearance may be due to a more mechanically perfect thread.

It is also the modern practice to burnish or polish the thread after it is woven.

EMBPOIDERY MATERIALS.

The metallic materials used in embroidery are of two sorts, those made from some variety of wire, and those made of sheet metal stamped into forms suggesting flowers, leaves, stars, etc. The latter are of recent origin and replace, to a great extent, such substances as the bright metallic green beetle's wings, still used occasionally. The small stamped forms are struck with a punch from thin bright sheet metal and though

they are mostly used in bangle making (*see* "Tinsel"), some are pierced with tiny holes to allow of their being sewn on to cloth.



STAMPED TINSEL USED IN EMBROIDERY.

Of the great variety of material made from wire, the most common are the circular flat pieces which in English are called "sequins" or "spangles" but are here called "chumkeys." These are of varying sizes from 1/16th to 1/4th inch in diameter.

They are made locally by first winding a silver or silver-gilt wire around another straight piece of wire and so forming a close spiral. The points of small scissors are then inserted into the hollow of the spiral and rings cut from it which are flattened into discs on an anvil with a blow from a heavy hammer.

The anvil, which is square in shape and slightly convex, is kept most carefully polished with the brightness of a mirror, and the hammer face also is kept in the same condition.

A clean cloth is so arranged that it completely surrounds the anvil and the small rings cut from the spiral are "fed" on to the anvil with a pair of tweezers held in the left hand of the worker.

The right hand holds the hammer which rains a continual succession of blows, each blow accounting for a complete and brightly polished chumkey. The skill and rapidity with which this is done is remarkable. These chumkeys are sold by weight according to their intrinsic value.

Cheap and inferior ones of german silver or brass are also imported, but on embroidery of good quality the silver-gilt ones are generally used.

Beside the plain gold thread used in embroidery, very skilful use is made of many of the "purls" or elaborate threads and cords constructed of extremely delicate flat or round wire.

One called "kuthoo-thar" (or num-tar) is made by winding a flat wire around a square shaped wire and when the square wire is withdrawn, the spring natural to the flat wire causes it to slightly twist backward, thereby presenting many tiny flat surfaces at different angles which reflect the light and give it a sparkling appearance.

Another sparkling wire called "chunnick-tar" is merely a fine spiral. That called "mugtha," which is the form used for making all the gold and silver braids and fringes, is a thin flat wire made by beating out a round one as is done in one of the preliminary operations of gold thread spinning.

"Nuckerf" or gold tape or braid made from mugtha is woven by hand on a very simple loom.

Cords fastened through a ring in the ceiling and attached to the toes of the weaver, work the warp threads (which is the flattened wire) up and down and the weft thread, which is generally yellow or red silk or cotton, is passed backward and forward, forming the tape.

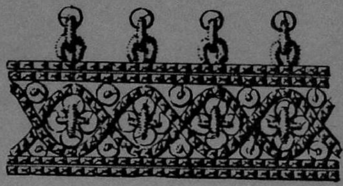
The tapes vary in width from 1/16th inch to half a yard.

There are five names for the different widths: "Thummick" made with only 5 to 8 wires; "Bugkey-Muckey" 12 to 15 wires in width; "Goat-tar" one to two fingers broad; "Kinnari" from 3 fingers to a span and a half; and "Pullow" from one foot to half a yard.

Very extensive use is made of these tapes by Mussalman embroiderers in decorating their clothing. Figure 10 shows some of the varieties.

Many of the wider tapes are given an additional lustre by forming a pattern on their flat surface. This may be done by passing them through patterned rollers or by stamping with a pattern, but is more commonly executed by the finger-nail alone. Diagonal lines with leaf forms between, rosettes, etc., are of frequent occurrence, and triangles formed on each edge producing a series of hexagons, is also a favourite pattern.

Still another sort of edging or braid is made with two flat strips of wire 1/16th or 1/32nd inches in width. These are folded backward and forward diagonally, so that the result is a series of four-sided pyramids which catch the light at different angles. This braid is used to a great extent in making the temporary finery used by Mussalman children. The illustration (Figure 11) shows a decoration for platted hair made entirely of this braid formed into circles and shown on to wire tape.

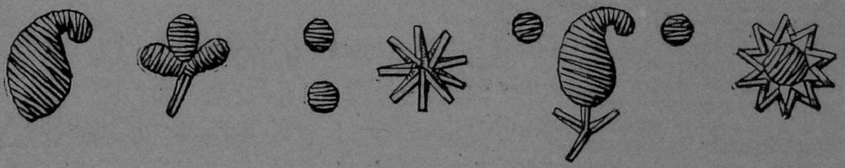


PURLS AND CHUMKEYS.

The effect is particularly sumptuous without being gaudy.

The manner and variety in which the various purls and braids may be used is only limited by the invention of the embroiderer, but a few of the more common units may be described.

The flat wire called "Mugtha" is often used to form stars, dots, leaves, etc., by couching on to the cloth, either quite flat or slightly raised, by inserting some sort of stuffing underneath. The wire is taken backward and forward, folded at the edges of the pattern and caught down with thread.



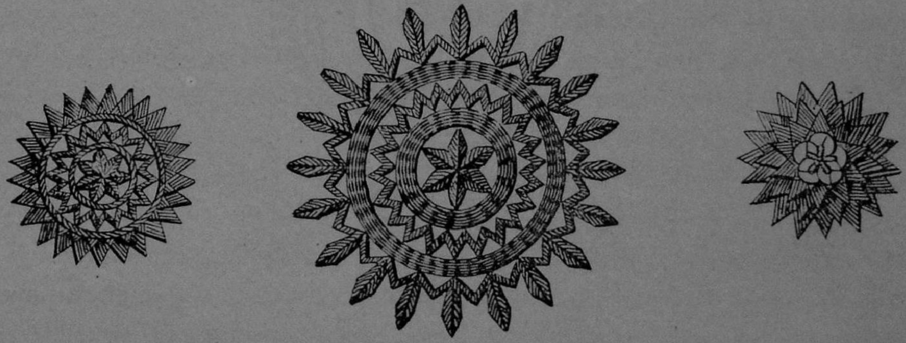
EMBROIDERED FORMS MADE WITH FLAT WIRE.

Many forms simple in themselves are thus made and repeated at short intervals over the surface of a cloth, giving an effect of great richness.

About 25 families in Trichinopoly work at this employment.

Cloths decorated in this way may often be mistaken for woven cloths.

The narrow varieties of silver and gold tape are made into stars, rosettes and various other forms by folding into points and arranging by radiating from a centre. (Figures 12 and 13.)



FORMS MADE WITH NARROW BRAID.

EMBROIDERY USES.

Often one sort of material is used in a great variety of ways to completely decorate an article of clothing, but more frequently many different varieties are combined together in one article. An excellent example of this latter manner may be seen in the illustration of the cap (Figure 14).

Chumkeys, purls, and braids of many sorts, both gold and silver, are couched on to bright orange satin in this specimen till the whole is stiff and heavy with the embroidery. Such a cap, which is worn by Mussalman boys, costs about Rs. 15 to make.

The illustration (Figure 15) is a somewhat less elaborate but more beautiful cap worked entirely with gold thread and chumkeys. The pattern which is arranged in bands leaves enough of the ground, green satin, showing, to form a pleasing contrast to the worked portion, and the arrangement of the thread with which the pattern is made shows great invention and skill.

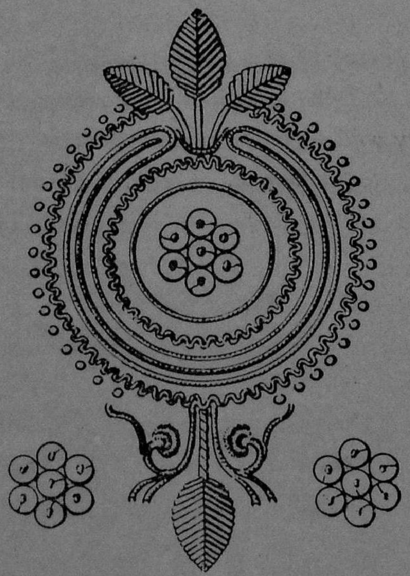
One is seldom privileged to see the finest of the embroidered clothing worn by Mussalmans at home or among their own people, on festive occasions, so it is somewhat of a surprise to find that its use is so general and extensive.

EMBROIDERED CLOTHING.

In connection with this monograph the writer had the opportunity of examining minutely the entire embroidered clothing belonging to a small Mussalman family, and a list and description may not be out of place to show the extent and richness of a characteristic family collection of embroidered clothing.

It may be mentioned that one's worldly position is measured to a great extent, by the richness and sumptuousness of their gold embroidered apparel.

The men's and boys' clothing consisted of caps and waist-coats ; besides the two caps described above, there were three others, one of blue velvet completely covered with gold braid and chumkeys ; one of woven cloth of gold, the pattern formed by a delicate outline of the ground colour only, all the remainder being gold thread ; and a soft cap of quilted red satin thickly embroidered with gold. Of the two waist-coats, which are worn without a sleeved coat, one was of cloth of gold, and the other, the richest and the heaviest piece of clothing of the lot, was of dark red velvet dotted at intervals with rosettes of chumkeys and gold thread, and the pockets and the edgings around the arm holes, etc., very richly and heavily worked.



EMBROIDERY AROUND WAIST-COAT POCKET OF GOLD THREAD AND CHUMKEYS.

This sort of waist-coat cost from Rs. 75 upward, according to weight.

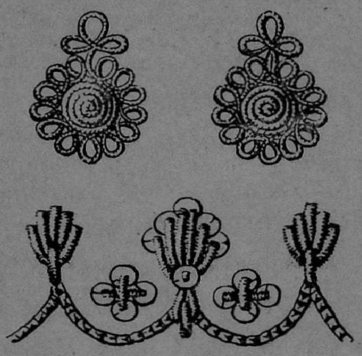
A boy's jacket, formed somewhat like a waist-coat, only with the front opening extending but half way down, was of rose pink satin with bright green edging. At intervals were worked rosettes of chumkeys and gold thread and the borders around the openings were of great elaborateness.

Another similarly shaped coat of orange coloured cotton with short sleeves was decorated with flat and crinkly braid with a wide border at the bottom and a diaper pattern above.

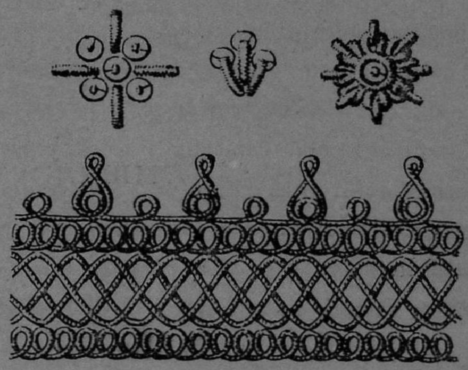
The women's and girls' clothing consisted of head coverings, jackets, trousers and skirts. The decorations on these were generally confined to edgings and borders, being so arranged that when worn together all the embroidery would be in evidence. Of the four jackets of varying sizes, one was of crimson satin thickly covered with gold, another of orange satin covered with a mango pattern made of flat wire outlined with gold thread ; a third, of small size, of orange cotton and silver wire ; and the fourth of scarlet satin with both gold and silver wire.

Some of the trousers, of which there were 3 pairs, were decorated with dotted patterns done in embroidery but resembling the woven cloths of Benares. The most elaborate parts were the bands around the bottom of the legs.

Of the two skirts, one was of yellow satin with small gold dots sprinkled over it, and with a wide ornamental border at the bottom, and the other, of purple satin with gold dots and an elaborate scroll border made of the flat wire outlined with gold thread.



EMBROIDERED PATTERNS MADE WITH GOLD THREAD, PURLS, AND CHUMKEYS.



Two peculiarities of all the made up garments were that there was always a lining or band of some colour contrasting strongly with the principal material, and that no pure silk was used, always the mixture, that is, satin made of silk with a cotton warp. This is said to be a custom always rigidly adhered to among Mussalmans.

The remaining articles of this collection consisted of a large purple handkerchief woven with a diaper pattern in gold thread, a triangular head dress of thin scarlet satin embroidered with a crescent and stars, and a green silk and cotton upper cloth with a diaper pattern, and border of gold braid at one end which was about half a yard in width.

These upper cloths, though woven somewhat differently from the Hindu women's sari, take the place of the sari among Mussalman women. Nearly all are made with a very wide tape or braid border at one end, sewn on to the cloth instead of being woven into it.

Of all the embroidered clothing examined, there were no pieces in which any other embroidery material than that made of gold or silver were used. Silk thread and the small mirrors, so common in North Indian embroidered clothing, seemed to be entirely tabooed.

Besides the embroidery used in the decoration of wearing apparel among Mussalmans, great use is made of small embroidered articles at weddings and other festive occasions. These are generally for temporary use only, and, while not as carefully made as pieces intended for more permanent use, are, nevertheless, full of decorative invention and skill of workmanship.

The quality which is most striking to the artist, apart from the decorative invention, is the almost perfect use made of the material employed.

All the decorative quality of gold and silver with just enough contrast of colour, is apparent in nearly every piece and there is an absence of vulgarity and gaudiness about them which is a characteristic of good Indian work. There is nothing in Western use with which the gold embroidery of South Indian Mussalmans can be compared, except the "properties" used in pantomimes and the theatre generally, but the contrast between the vulgar and glittering dress and paraphernalia of the theatre with the refinement and good taste displayed in this Indian work is great indeed.

While some of the embroidery used is made by regularly employed men-embroiderers, the greater amount for domestic use is entirely the work of the women and girls of the family.

Needlework, a somewhat rare accomplishment among Hindu women, is much more a part of the Mussalman girl's education than the "three R's" and very young girls often acquire a skill in embroidery which is truly remarkable.

Figure 16 shows two pairs of embroidered ornaments worn by the sisters and sisters-in-law of a bride, a pair for each girl, and they are worn at the end of their plats during the wedding ceremony.

A small elaborately embroidered bag, filled up with nuts, spices, and a silver ear-pick, is given by the bride to her mother-in-law on her wedding-day, and another also elaborately worked bag or purse, made of flat strips of material, with strings at each end, is worn by the bridegroom tied around his arm. The bridegroom's purse is sent to him by his future mother-in-law who fills it with money, and he wears it during the bridal procession, giving the contents either to the poor or to his sister on his return to the bride's house.

EMBROIDERY AMONG HINDUS.

Among the Hindus the use of embroidery is not so marked as among Mussalmans, but more and more frequent use is made of it from year to year, especially in articles of clothing—particularly caps worn by children.

These caps, sometimes also worn by adults, generally have an embroidered band only, around them.

Among the paraphernalia used in religious festivals, occasionally may be seen, most elaborately embroidered parasols, canopies, and elephant, horse and camel trappings often thick and heavy with gold. At the recent Mahamakam festival at Kumbakónam, there were two palanquins used by priests which were entirely covered by gold embroidery. The rich effect produced by these vehicles, as they made their way through the dense masses of people in the bright sunlight, can be easily imagined.

One other use to which the gold and silver spangles and some of the gold wires and threads are put by Hindus, is in the dressing of figures in pictures. A usual way is to procure a coloured print and, following the lines of the clothing, use bits of silk or other stuff, which are delicately sewn on and elaborated in parts with chumkeys and gold or silver threads.

The jewellery also worn by the figures is represented by coloured bits of tinsel and wire. These pictures are occasionally done with some skill and good taste, but more often the result is more gorgeous than beautiful. They are extremely popular and can be found in the houses of most well-to-do persons.

EMBROIDERY IN THE DISTRICTS.

Some of the districts of the Presidency produce characteristic work in embroidery, as the highly ornate garlands of Tanjore.

On the one illustrated in Figure 17 almost every sort of tinsel, foil, and wire, is used, on a foundation of pith, covered with velvet.

The part which passes around the neck is ornamented with chumkeys, and the small figures below, carved from pith, are covered with gold foil.

The main parts of the garland have scrolls, flowers, and rosettes worked in bands between rows of imitation pearls, and the tassels are made of the thin flattened wire called " mugtha."

These are somewhat heavy in outline and stiff because of the rigidity of the main portions, but they have one advantage over the usual flower garland in that they do not damage the clothing of the wearer.

The cost of these is from Rs. 5 to Rs. 15 according to the work bestowed upon them.

In various parts of Malabar, considerable quantities of the embroidered skull caps, the almost universal head gear of the Mapilla men and boys, are made, the best being fashioned by Mapilla women in Cannanore. They sell at from Rs. 2 to Rs. 3.

So far as the present writer has been able to ascertain, in no other districts are there any considerable numbers of embroiderers producing one sort of article as a usual occupation. At the Nagercoil Mission some lace, such as is usually made of cotton, linen or silk thread, has been made of gold thread by the workers. Some examples in the Trivandrum Museum are distinctly good, though it would seem, from its very infrequent use, to have been something of an experiment only.

Apart from a stiffness which must be, of necessity, the possibilities of decorating fine clothing with real " lace " of gold thread seems worth trying.

Figures 18 and 19 show two garlands made of thin, flattened gold wire.

TINSEL.

Tinsel may be understood to include almost any bright metallic substance used to add richness or gaudiness to apparel or to temporary decorations.

The general idea of tinsel is something more or less impermanent which gives an effect of great gorgeousness and glitter at a small cost, and it is used so extensively on festive occasions that it has come to be in no way a deception except perhaps to very young children. What may, and what may not be included under this head is difficult to determine, but in the present instance, as many tinselly articles are included under " wire," it has been decided to include under " tinsel " only those articles made up of, or decorated with, coloured metal foil.

Metal foil is very thin sheet metal, something between gold leaf and ordinary thin sheet metal in thickness: perhaps as good an idea as could be given would be to say, that it is thin enough to be easily crushed without injuring the hand. A metal which is capable of being rolled or hammered into foil must be both soft and tenacious and the metals commonly used are lead, aluminium, tin, copper, gold and silver. Tinsel, however, is commonly bright copper foil, which has the required stiffness, thinly plated with silver and then covered with a transparent lacquer varnish of some bright colour. The colours in general use here, being yellow, green and red, though almost any colour may be had.

Before the use of rollers for flattening and polishing, metal foil was made by hammering, entirely by hand, and different colours were got by a variety of alloys, though these were of necessity very limited in range and quickly tarnished. Originally, the use of foil was restricted almost entirely to that use under precious stones to form reflectors, and the colours used for this purpose were white (silver), red, green and yellow.

IMPORTATION OF TINSEL.

As is the case with gold-thread, the tinsel used in this Presidency is practically all imported, the larger part from France, with small quantities from Germany and Austria-Hungary and occasionally from Norway and Italy also. It is separated in the Customs Reports under the head "Lametta", but this includes foils of other metals besides copper.

About one-fifth of the total Indian imports comes to Madras.

The average price is Rs. 1-2-0 per lb. wholesale.

In Madras, the tinsel, which is imported in books, which weigh about 1¼ lb. each, contain 100 sheets. These are sold at from Rs. 2-6-0 to Rs. 2-8-0 according to colour, the red and green being a trifle more expensive than the white.

At retail, it may be purchased by the single sheet, about 4½ inches by 10 inches for 6 pies. Large quantities are sold in the mofussil, and a small export trade to Rangoon is also done by Madras merchants.

Import of Tinsel into the Port of Madras.

Where from	1906–07.		1907–08.		1908–09.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	LBS.	RS.	LBS.	RS.	LBS.	RS.
France	14,100	25,029	14,650	31,044	12,450	26,869
Austria-Hungary ...	1,575	3,450	1,900	4,524	4,110	9,361
Germany	850	1,637	324	1,340	1,787	3,649
Norway	...	...	200	376	...	...
Italy	1,500	1,313	...	...	...	...
Total ...	18,025	31,429	17,074	37,284	18,347	39,879
Imports into the Port of Cochin.						
Germany	...	...	...	...	125	238
Grand Total ...	18,025	31,429	17,074	37,284	18,472	40,117

Total Imports into all India.

Year.	Value.	Percentage of total imports entering Madras.
	RS.	PER CENT.
1906–07	1,46,270	21
1907–08	1,90,823	19
1908–09	1,86,276	21

TINSEL USE.

One common use of tinsel is in the making of garlands, those shown in Figures 20 and 21 being characteristic specimens. Flower-like forms are made by cutting out circles and star-shaped pieces of different colours and sizes to form the cup of the flower and the petals are made of a bunch of very narrow flattened silvered wire gathered together in the centre, and radiating towards the edges, in much the same way that tassels used in embroidery are made. These are strung together with a long thin tube, also made of foil, between them, and as many as 10 or 12 strings gathered together, may complete the garland.

Bands of tinsel decorated with circles and narrow ornamental strips of varying colours are often used to make richer, the usual flower garland, and bird forms with outstretched wings, much more gorgeous than any living creature, are also frequently added. It seems somewhat like painting the lily but there is no doubt of the enhanced effect being gained, even though the real beauty and delicacy of the flowers may suffer.

Foil in these garlands is also used pressed over shapes made of pith and the ingenuity and invention sometimes displayed is worthy of more permanent results.

At Hindu weddings, frequent use is made of tinsel in decorating the pandal and bridal car. It is frequently used together with mica and often in a very artistic manner.

In pandal decorations at temple festivals it is also sometimes used to a large extent.

LAC BANGLES MADE WITH TINSEL AND FOIL.

Lac bangles in which foil and tinsel are used are made, by first forming the lac mixed with clay into strips, and then by cutting to the proper length and joining the ends of the strips into rings. Those shown in Figure 22, which are made in Kumbakónam, are $\frac{1}{4}$ inch wide and $2\frac{1}{4}$ inches in diameter. The narrow strip which is semi-circular in section is decorated on the flat outer side by applying small circles of tin foil coloured red, green or gold, and these are sunk into the wax and held in position by circular bits of very thin glass, the foil being thereby glazed and protected, and the colour of the foil shining through the glass gives an effect very like a ruby or an emerald.

Some have very narrow strips of corrugated gilt tinsel along each edge and others have tiny points of foil like pinheads between the circles of glass.

The lac foundation is coloured yellow, red, green or black. The prices range from six pies to two annas a pair. The method of fitting them to the wrist is simple but ingenious. The bangle is warmed over a fire and a small piece cut out with a pair of scissors ; it is then gently pulled apart enough to slip it over the wrist and when enough has been cut away to make a good fit, the ends are again warmed, the bangle slipped over the wrist, and the ends pressed together. In more ornate and larger lac bangles which would not allow of this method of fitting the two halves are sometimes hinged like a metal bracelet.

Elaborate bangles such as are shown in Figures 23 and 24 are generally made on a foundation of thin glass bangles 2, 3 or 4 according to the width of the finished articles which are from $\frac{3}{8}''$ to $\frac{3}{4}''$ wide. The glass, bangles are slipped on to a holder of wood and the lac which is kept warm and pliable in a vessel at one side is spread on with a flat tool, the working taking place over a small charcoal fire. The bangle is thus shaped with a flat surface on the outside and on this are placed " spangles " and bits of foil which are embedded in the lac to form the pattern.

Some have geometrical patterns arranged in diamond or circular shapes and of a flat surface, while others are arranged in flower or mango shapes and with the spangles placed at an angle so that the surface has the

4

appearance of being modelled. They have a character all their own. They are extensively worn by Mussalman women. Those illustrated were procured in Madras.

VARIETY OF LAC BANGLES.

The variety of lac bangles is, like so many Indian productions, almost infinite, every district where they are made producing some special pattern. The ones described are of but two classes, but both seem more or less honest, in that they do not avowedly imitate any superior article.

There are, however, many other sorts of lac bangles which do imitate the usual forms of gold and silver bangles. These are made by applying foil which has passed between patterned rollers, to a lac foundation.

Many of the bangle makers have these rollers and turn out strips of foil of different patterns, or the strips may be had from dealers ready for use. The most common one is a poor imitation of the thick chain pattern generally worn as anklets.

BANGLE-MAKING IN THE DISTRICTS.

In the various districts several centres produce considerable numbers of bangle makers.

Many of the bangle sellers are itenerant workers, much in evidence and doing a thriving trade at religious festivals, and their simple and primitive tools and apparatus make it possible for them to execute their work in almost any corner of a bazaar or convenient place by the roadside. Their bright-coloured wares add distinctly to the gaiety of the scene and the deftness and skill which they display in fitting new bangles should be seen to be appreciated.

In Trichinopoly 100 Mussalmans and Balijas are said to work at bangle-making, while in the same district 200 Balijas at Kavaraipalayam, a hamlet in the Udayarpalayam taluk, and a smaller number of the same caste at Srirangam, Karur, Sendamangalam and Kosavampatti in Namakkal taluk, Salem district, also work at bangle-making.

They use the stick-lac refuse of the dyers, mixed with an equal quantity of earth from an ant-hill and a small quantity of resin, as a foundation.

The making of lac bangles seems to be almost wholly in the hands of either Balijas or Mussalmans, the former predominating.

In the Madura district they are made in Tirumangalam, Periyakulam and Melamangalam by Gazula Balijas; in Tanjore City by about 100 Mussalmans; in South Arcot at Krishnapuram near Ginjee; Eraiyur in the Tirukkoyilur taluk; and Parur in Vriddhachalam also by Gazula Balijas.

North Arcot seems to possess the greatest number of bangle makers of any district. Including the makers of glass bangles there are over 4,000 persons engaged in the industry.

CONCLUSION.

In concluding this account of "Tinsel and Wire" it would be incomplete not to mention embroidery made for foreign markets.

At one time considerable quantities of embroidery of white and coloured threads was made in Madras for the European market, but no large amount of gold thread embroidery has ever been exported. This is due, partly to an unfounded fear on the part of the purchasers that it will not stand washing, but more perhaps on account of designs unsuited to European tastes.

The use of gold, either with white or colour, depends for its best effect on the correct artistic quantity in which it is used. Artists have generally decided that it may be used satisfactorily only in two ways,—either as outlining or in large quantity, no middle course producing a result other than that of tawdriness.

For this reason the gold cloths in which much gold is used are nearly always of a higher artistic quality than the cloths with little gold in them, and gold thread of any sort used in embroidery is in better taste if used, either as outlining or as solid masses. These principles seem to be thoroughly understood by Mussalman embroiderers and by Hindu weavers when they are working for native use, but are apparently cast aside, when working for foreign markets. Figures 25 and 26 show, respectively, a d'oyley and a table cloth delicately embroidered in gold thread, though it is seldom that patterns in such good taste can be found among the usual stock of the Madras embroiderer.

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No. 2.

No. 3.

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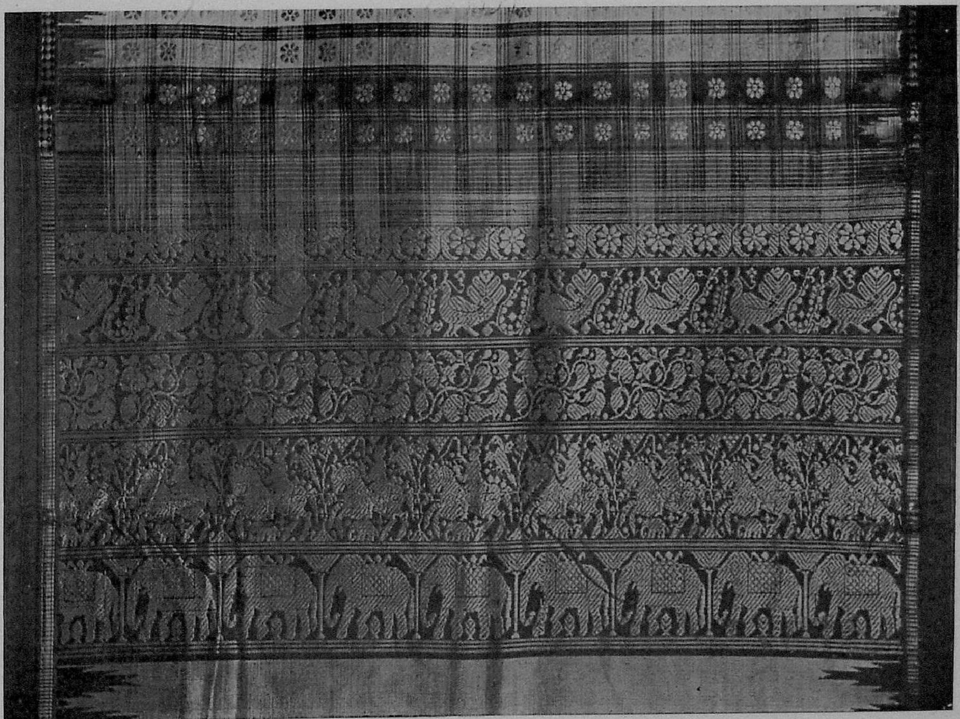

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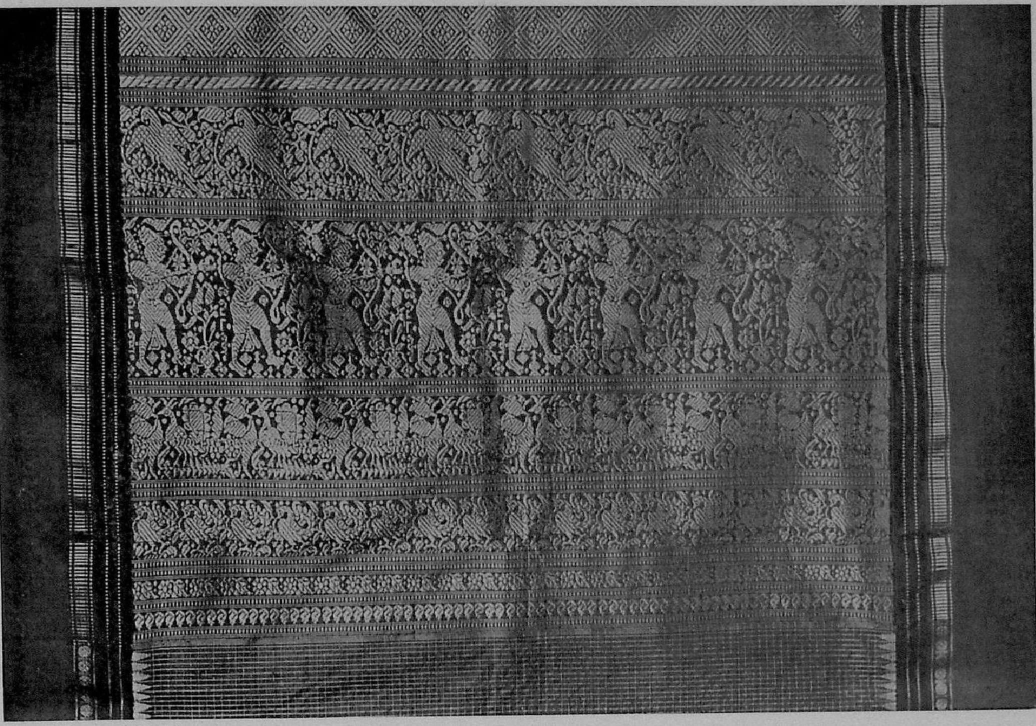

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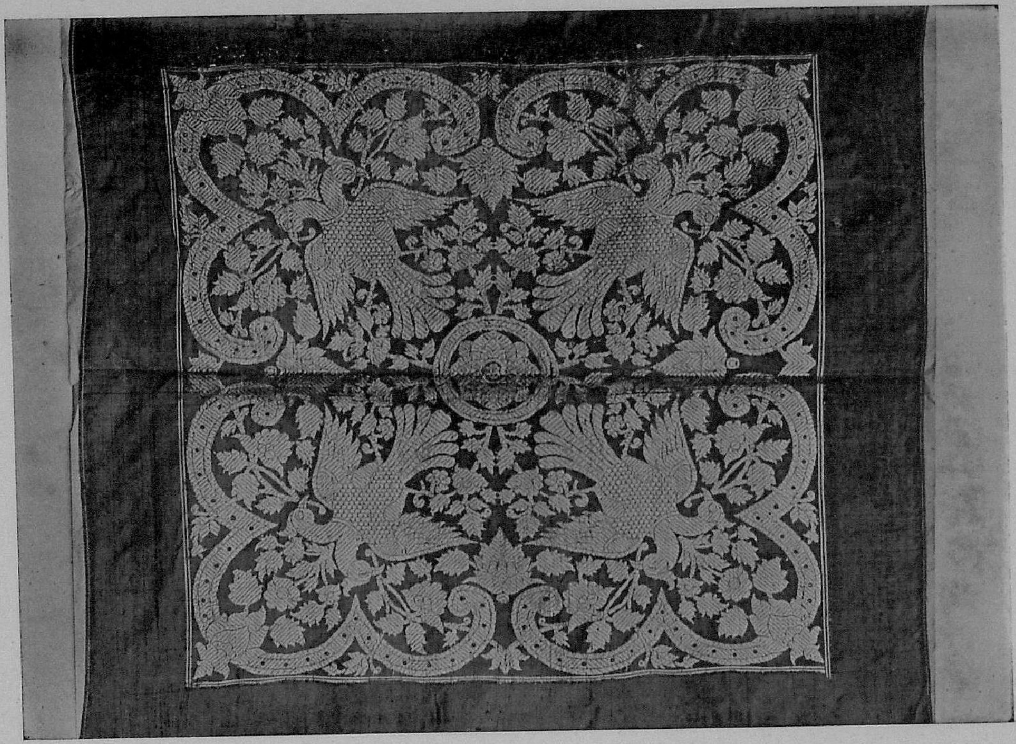

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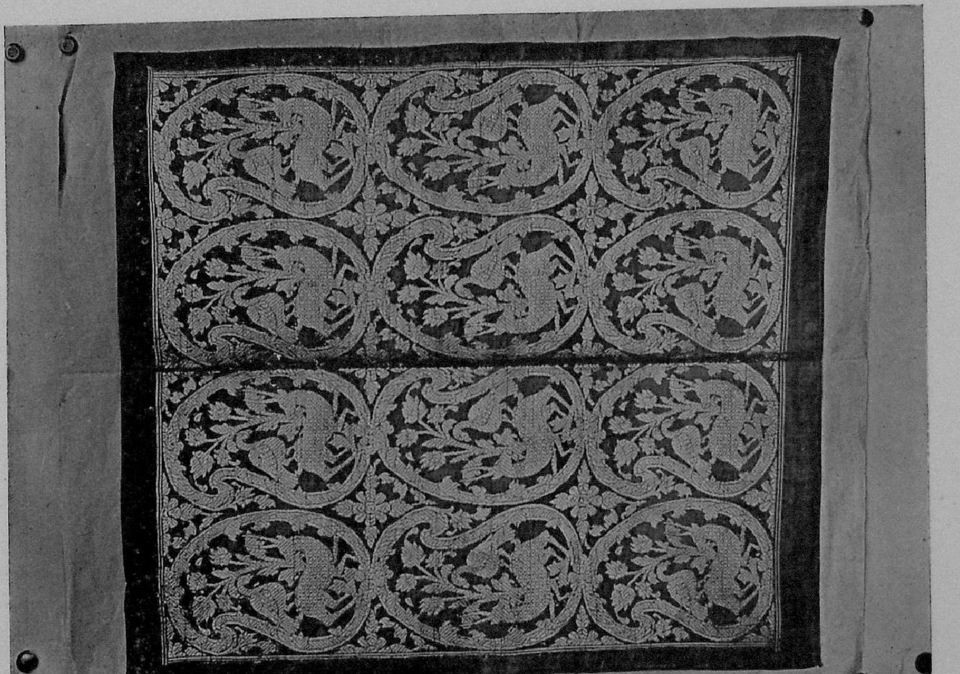

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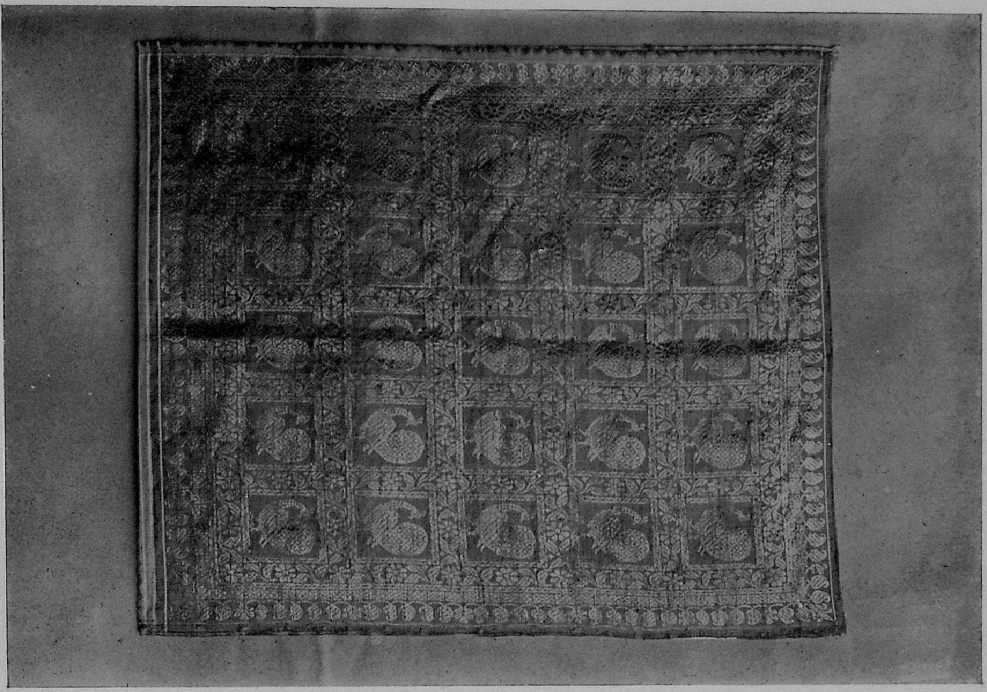

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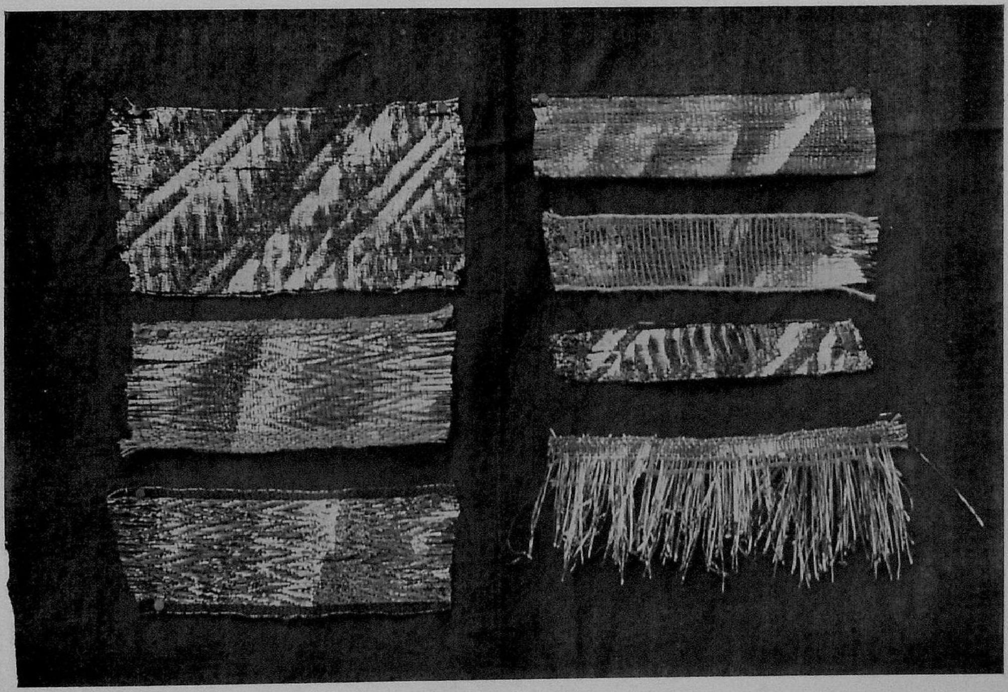

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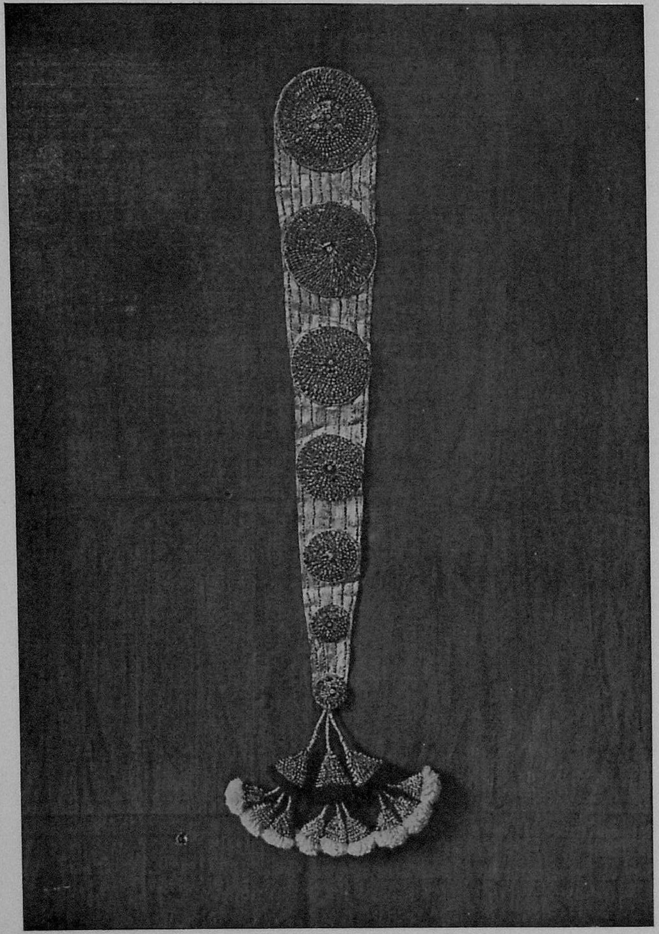

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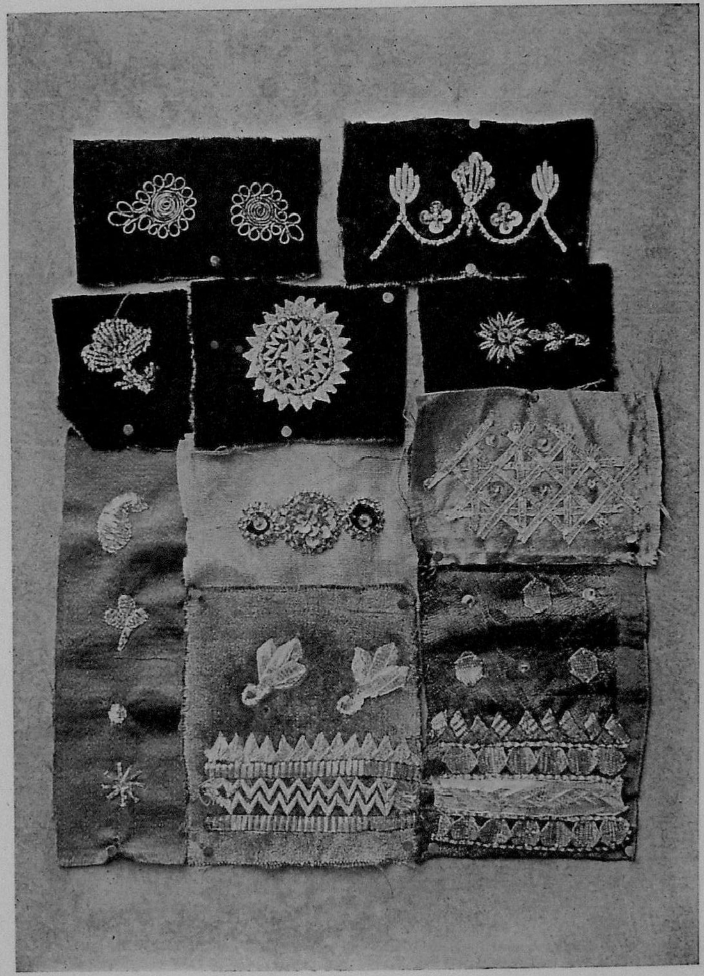

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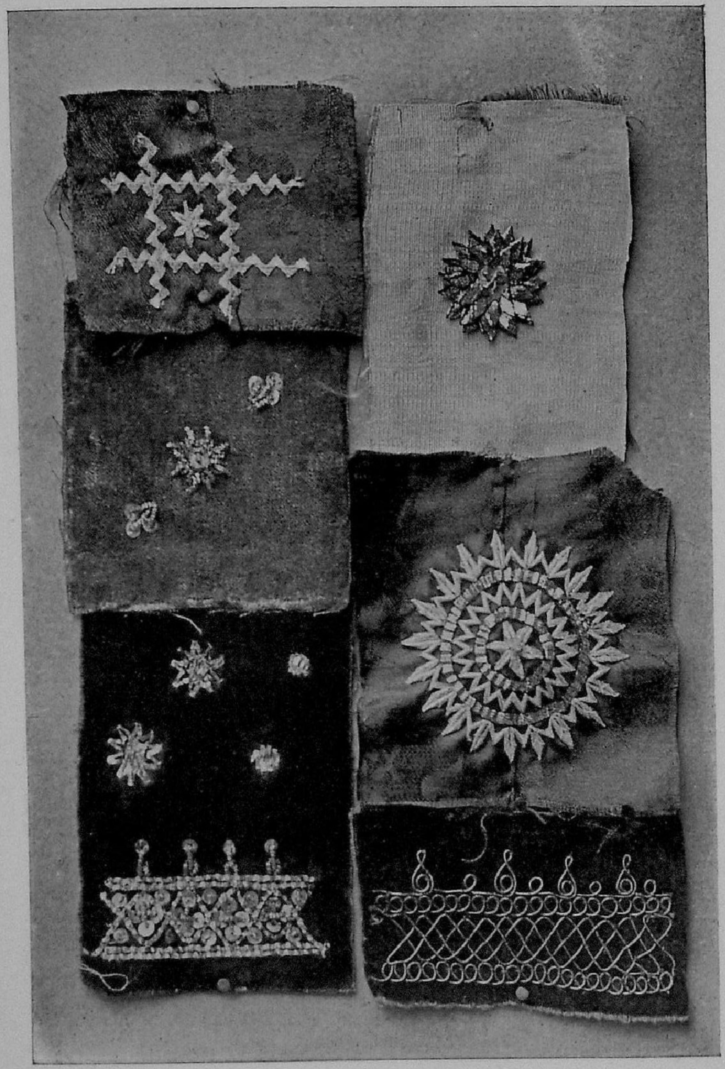

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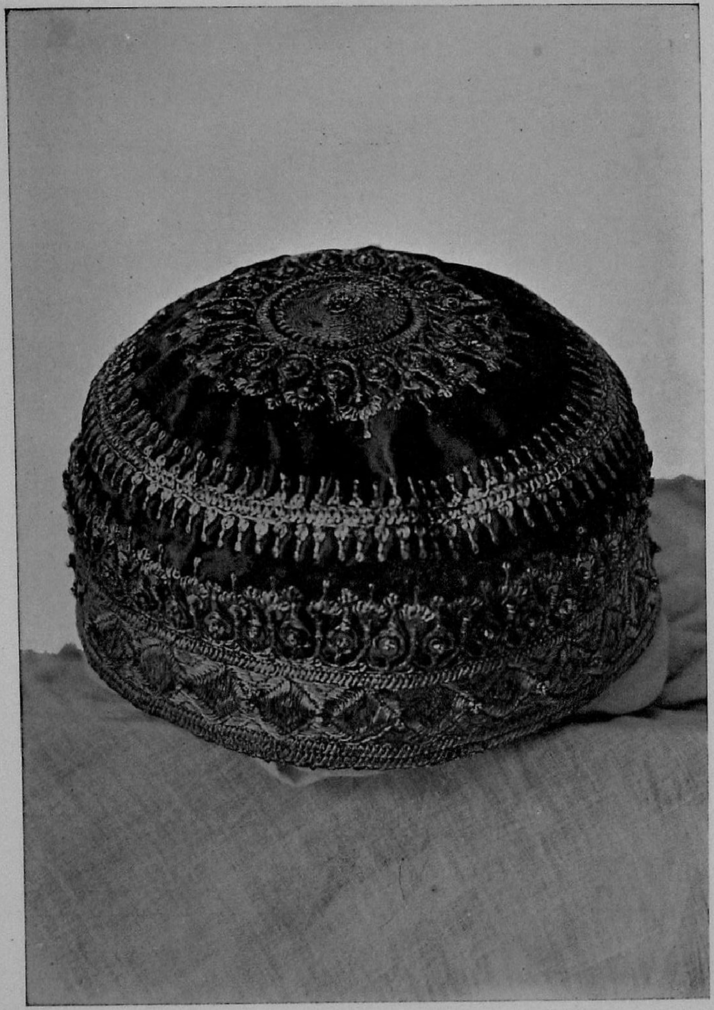

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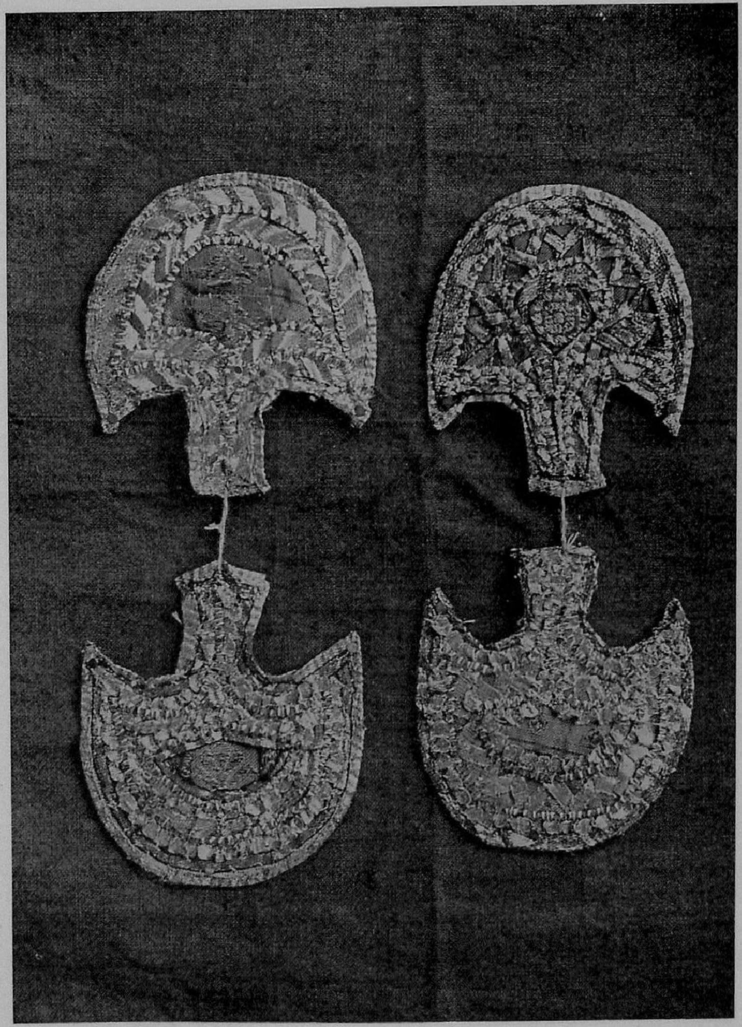

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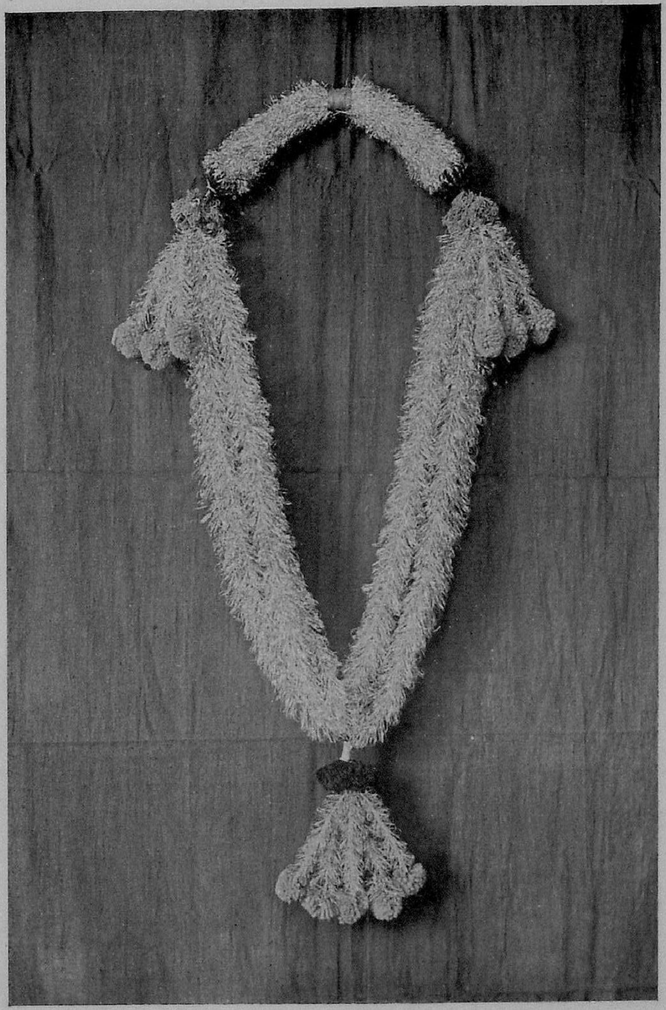

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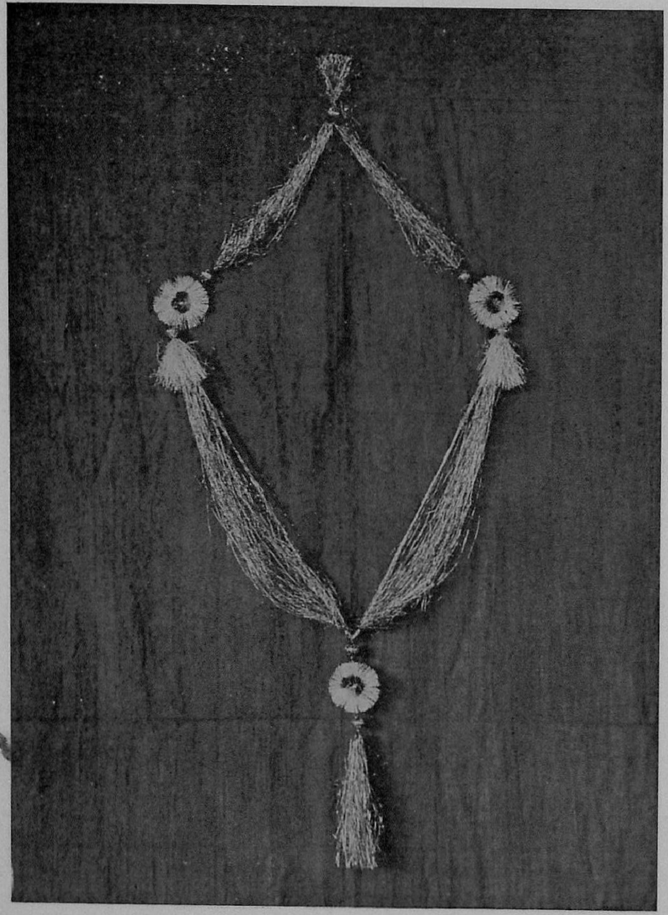

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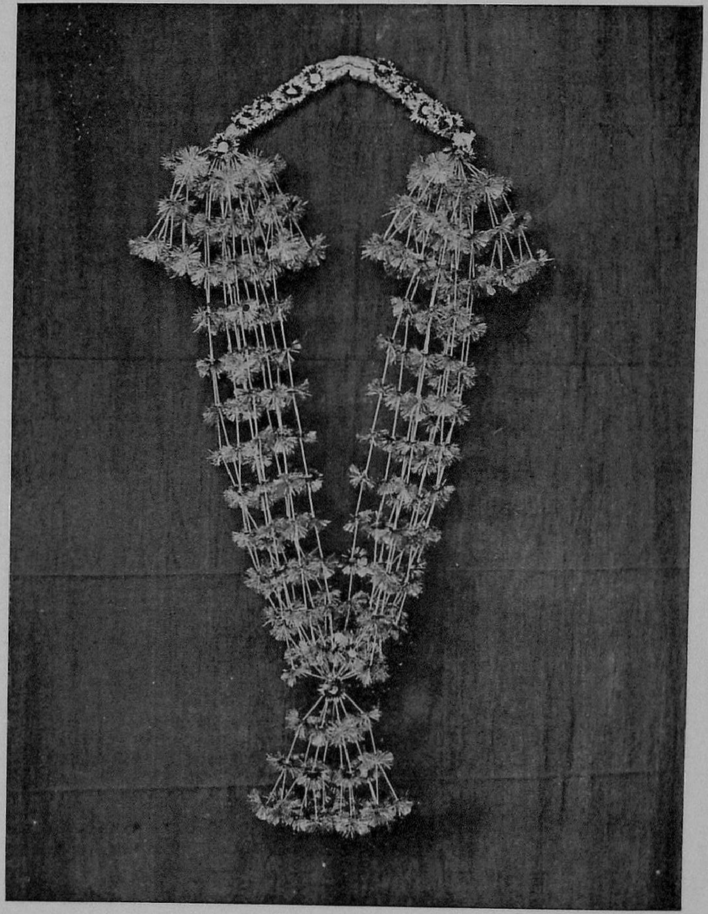

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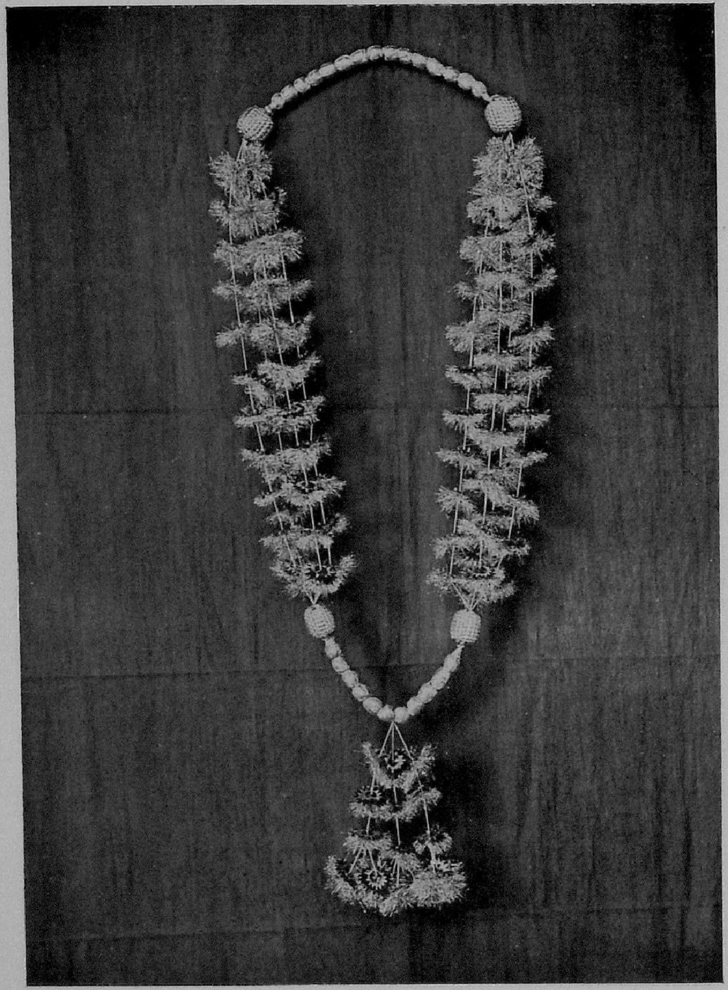

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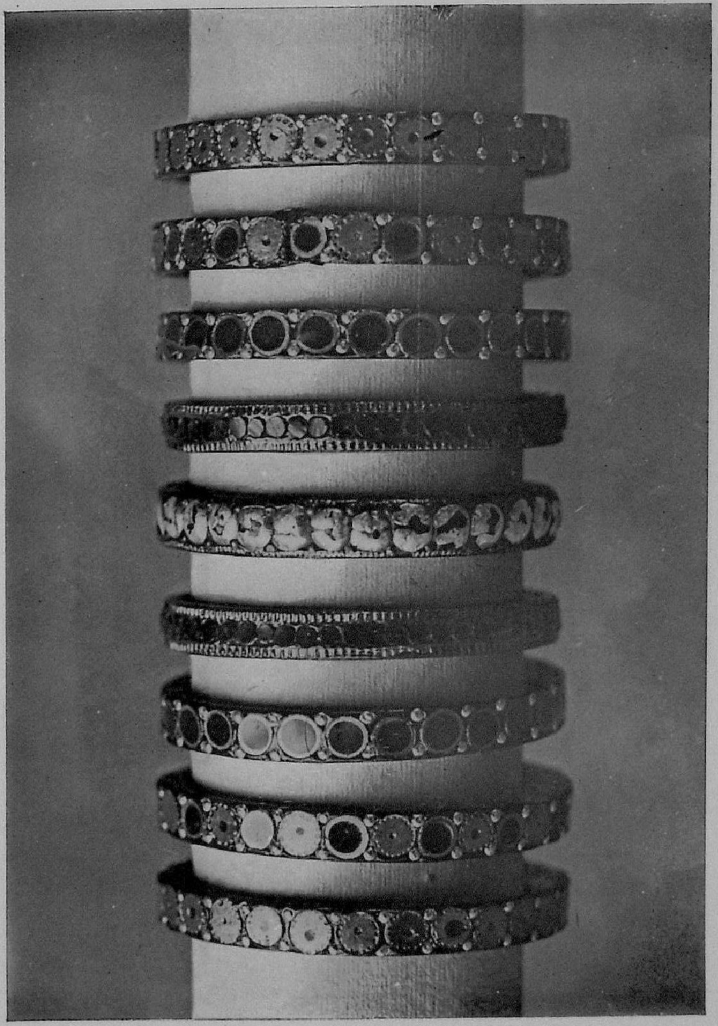

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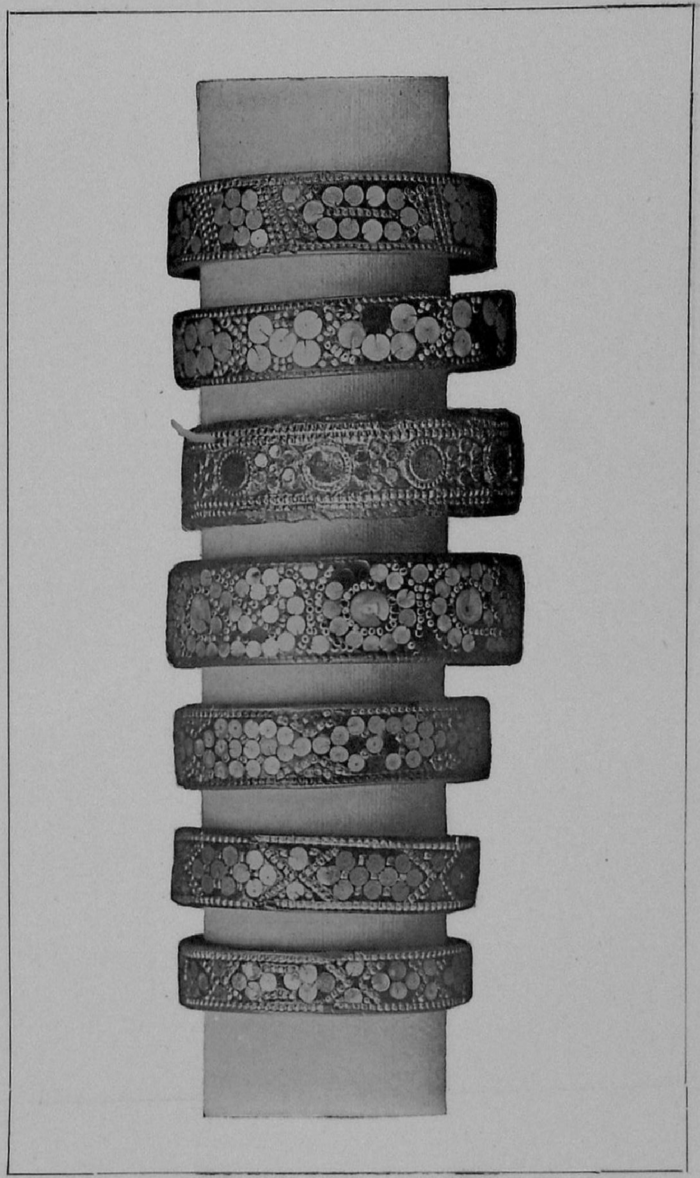

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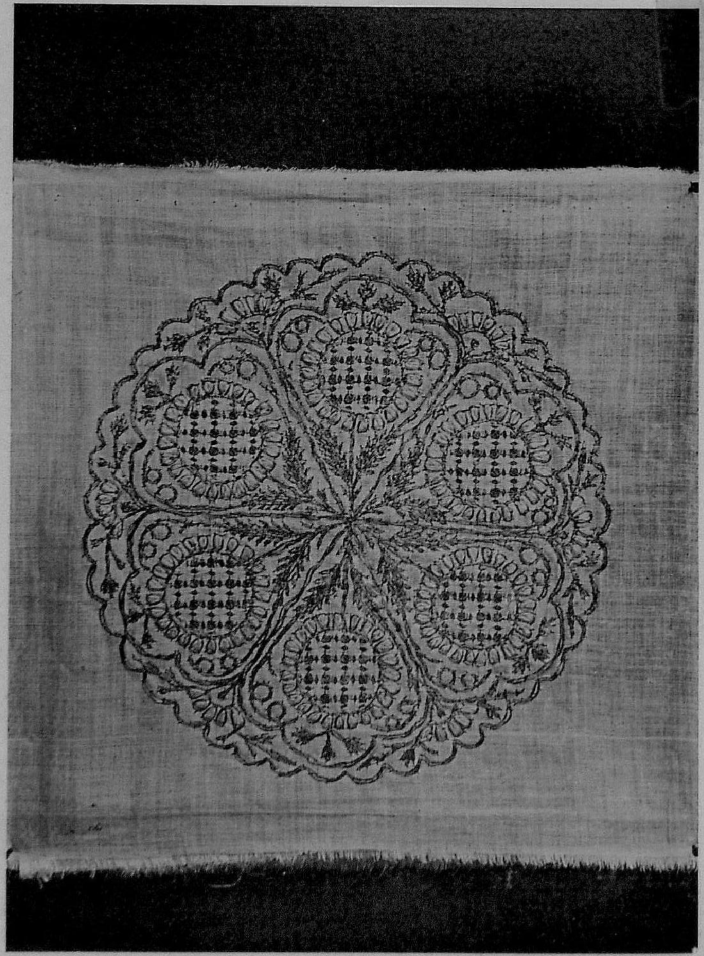
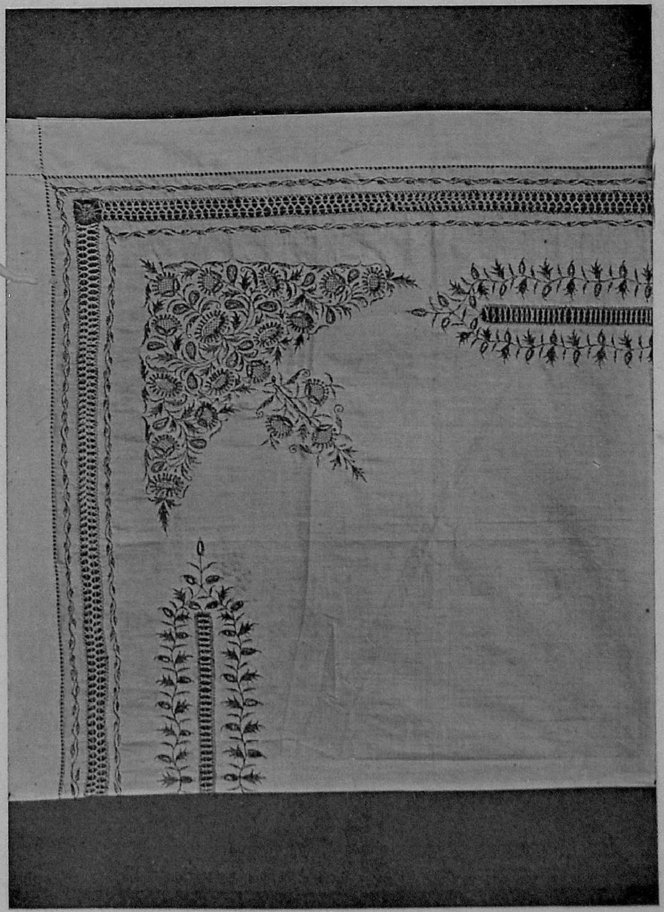
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